AMENDMENTS TO THE SPECIFICATION

Please add the following heading on page 1, before line 1, after the title:

-- FIELD --;

Please add the following subheading on page 1, after line 36:

-- BACKGROUND --;

Please add the following heading on page 2, after line 15:

-- SUMMARY --

Please add the following heading on page 5, after line 2:

-- DESCRIPTION OF THE DRAWINGS--

Please replace the 5th, 6th and 7th paragraphs on page 5 with the following amended paragraphs:

~~Figure 4 shows~~ Figures 4a and 4b show an example of an antenna arrangement comprising four full Luneburg lenses and associated feed elements designed to provide hemispherical coverage without blockage;

~~1. Figure 5 shows~~ Figures 5a-5d show a multiple beam antenna arrangement according to a preferred embodiment of the present invention, based upon virtual source antennae preferably of the type shown in Figure 2, and designed to provide at least full hemispherical coverage without blockage;

~~Figure 6 shows~~ Figures 6a and 6b show a multiple beam antenna arrangement according to a further preferred embodiment of the present invention, using a combination of virtual source antennae and a full Luneburg lens to provide full hemispherical coverage without blockage;

Please add the following heading on page 6, after line 4:

-- DETAILED DESCRIPTION--

Please replace the last paragraph on page 10 with the following paragraph:

[[1.]] Referring to Figure 7, a typical switching network 70 is shown comprising a plurality of switches 71, 72, 73 arranged in a binary tree. A top layer of switches 73 is connected to antenna feed elements 54, 55, 58, 62. As is typical in a binary tree arrangement, each layer of switches 72, 73 is fed by a layer below having at most half as many switches. An input/output 74 to the lowest layer of the network 70 is connected to a transmitter (not shown) or receiver (not shown), respectively. The number of switches 71, 72, 73 required for a binary switching network 70 feeding N antenna feed elements 54, 55, 58, 62 is:

$$1 + 2 + 4 + ... + N/2 = N - 1$$